Claims:

1) A method of inducing apoptosis or cell death in transformed or non-transformed cells in a patient by administering to the cells RNA strands.

2) The method of claim 1 wherein the RNA strands are on average between 1kDa and 50kDa in size.

3) The method of claim 1 wherein the RNA strands are dsRNA.

4) The method of claim 1 wherein the RNA strands are ssRNA.

5) The method of claim 3 wherein the dsRNA is pA:pU.

6) The method of claim 5 wherein the dsRNA is administered by intravenous administration and in dosages ranging from 1 - 999 μg/kg.

7) The method of claim 3 wherein the dsRNA is administered to the patient in a concentration ranging from 1 - 500 μg/kg.

8) The method of claim 1 wherein the patient is human and the cells are cancer cells and dsRNA is pA:pU and the dsRNA is injected directly into the cancer cells.

9) The method of claim 4 wherein the ssRNA is pA.

10) The method of claim 1 wherein the transformed cells are selected from the group consisting of T cell leukemia cells, human monocytic leukemia cells, human adenocarcinoma cells and human lung fibroblasts.

11) A method of inducing cell death or apoptosis in cells by administering ssRNA or dsRNA to cells, wherein the ssRNA or dsRNA is smaller on average than 20kDa in size.

12) The method of claim 11 wherein the ssRNA or dsRNA is smaller on average than 10kDa in size.

13) The method of claim 12 wherein the cells are transformed cells.

14) The method of claim 12 wherein the ssRNA is pA.

15) The method of claim 11 wherein the dsRNA is pA:pU.

16) The method of claim 12 wherein the cells are cancer cells.

17) The method of claim 1 wherein the RNA strand induces an enhanced cytokine production of TNF - alpha thereby directing a T_1 immune response against the cells.

18) The method of claim 12 wherein the RNA strand induces an enhanced cytokine production of TNF - alpha thereby directing a T_1 immune response against the cells.

19) The method of claim 1 wherein the use of RNA to induce cell death induces an enhanced immune response against the cells.

20) The method of claim 1 wherein the RNA is administered *in vivo* to cells by a mode of administration selected from the group consisting of topical administration, systemic administration or direct injection.

21) A method of inducing apoptosis in cells by administering ssRNA or dsRNA to cells, wherein the ssRNA or dsRNA is smaller than 10KDa in size.

22) The method of claim 21 wherein the RNA is ssRNA and is pA.

23) The method of claim 21 wherein the RNA is dsRNA and is pA:pU.

24) The method of claim 21 wherein the cells are transformed cells.

25) The method of claim 21 wherein the induced apoptotic cells induce an enhanced IL-12 cytokine production.

26) The method of claim 21 wherein a Th-1 response is induced.

27) The method of claim 1 wherein the RNA is dsRNA and is greater than 50 kDa in weight and induces an enhanced IL-12 response.

28) A composition for inducing cell death or apoptosis in transformed cells in a patient wherein the composition is comprised of dsRNA with an average weight between 1 - 50kDa.

29) The composition of claim 28 wherein the average weight of the dsRNA is less than 20kDa.

30) The composition of claim 28 wherein the average weight of the dsRNA is less than 10kDa.

31) The composition of claim 28 wherein the dsRNA is pA:pU.

32) The composition of claim 28 wherein the dsRNA induces an enhanced cytokine production of TNF - alpha.

33) A composition for inducing cell death or apoptosis in transformed cells wherein the composition is comprised of an oligonucleotide wherein the oligonucleotide is comprised of at least two base pairs selected from the group consisting of adenine, uracil, cytosine, guanine and inosine and wherein the oligonucleotide is between 1kDa - 50kDa in weight.

34) The composition of claim 33 wherein the oligonucleotide is ssRNA.

35) The composition of claim 33 wherein the oligonucleotide is dsRNA.

36) The composition of claim 33 wherein the ssRNA is pA.

37) The composition of claim 35 wherein the oligonucleotide is pA:pU.